

September 27, 1999

Mr. R. P. Powers
Senior Vice President
Nuclear Generation Group
American Electric Power Company
500 Circle Drive
Buchanan, MI 49107-1395

SUBJECT: D. C. COOK OPERATOR LICENSING REQUALIFICATION AND SPECIAL
INSPECTION REPORT 50-315/99016(DRS); 50-316/99016(DRS)

Dear Mr. Powers:

On August 6, 1999, the NRC completed a routine on-site inspection of the licensed operator requalification training (LORT) program at your D. C. Cook, Units 1 and 2 reactor facilities. An exit meeting was conducted at the facility following the conclusion of the inspection on August 17, 1999, and the preliminary inspection findings were discussed with station management and staff. The enclosed report presents the results of this inspection. No cited violations of NRC requirements were identified.

In addition, we concurrently completed a special inspection that reviewed your corrective actions related to Case Specific Checklist Item No. 5.D, "Applicant Abilities to Communicate and Diagnose Events During Dynamic Simulator Scenarios." As delineated in our letter to you, "Case Specific Checklist Update for Restart of D. C. Cook Plant," dated September 17, 1999, we determined that you have appropriately addressed Case Specific Checklist Item No. 5.D, and we consider this item closed.

During the 2-week inspection period, your staff's implementation of the training program was generally characterized by safety conscious operations and sound evaluation of licensed operator performance. Also, the operating examination materials (simulator scenarios and job performance measures) prepared by your training staff were considered satisfactory. The inspectors concluded that the LORT program was satisfactorily implemented in accordance with 10 CFR Part 55 requirements. However, the inspectors noted several minor performance weaknesses pertaining to crew communications, procedure use, and command and control during the dynamic simulator scenario evaluations. Furthermore, the inspectors identified several programmatic deficiencies relating to examination security, medical records, and maintenance of active operator license status.

Based on the results of this inspection, the NRC has determined that violations of NRC requirements occurred. The violations pertained to the failure to maintain examination material security, maintain licensed operator biennial medical examinations, notify the NRC of changing medical conditions, and maintenance of active operator licenses.

However, these violations are being treated as Non-Cited Violations (NCVs), consistent with Appendix C of the Enforcement Policy. The NCVs are described in the subject inspection report. If you contest the violation or severity level of the NCV, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001, with copies to the Regional Administrator, Region III, and the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001.

Appendix C of the Enforcement Policy requires that for Severity Level IV violations to be dispositioned as NCVs, they be appropriately placed in a licensee corrective action program. Implicit in that requirement is that the corrective action program be fully acceptable. The D. C. Cook Plant corrective action program was not adequate and has been the focus of significant attention by your staff to improve the program. While your staff and the NRC have not yet concluded that the corrective action program is fully effective, the corrective action program improvement efforts are underway and captured in the D. C. Cook Plant Restart Plan which is under the formal oversight of the NRC through the NRC Manual Chapter 0350 process, "Staff Guidelines for Restart Approval." Consequently, these issues will be dispositioned as NCVs.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, the enclosure, and your response to this letter, if you choose to provide one, will be placed in the NRC Public Document Room.

We will gladly discuss any questions you have concerning this inspection.

Sincerely,

/s/ J. A. Grobe

John A. Grobe, Director
Division of Reactor Safety

Docket Nos. 50-315; 50-316
License Nos. DPR-58; DPR-74

Enclosures: 1. Inspection Report 50-315/99016(DRS); 50-316/99016(DRS)
2. Simulation Facility Report

See Attached Distribution

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John A. Grobe, Director
Division of Reactor Safety

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MI Department of State Police
D. Lochbaum, Union of Concerned Scientists
Barry J. Wallace, Training Manager

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Nos: 50-315; 50-316
License Nos: DPR-58; DPR-74

Report No: 50-315/99016(DRS); 50-316/99016(DRS)

Licensee: American Electric Power Company

Facility: Donald C. Cook Nuclear Generating Plant

Location: 1 Cook Place
Bridgman, MI 49106

Dates: July 19 - 23, 1999
August 2 - 6, 1999

Inspectors: H. Peterson, Lead Inspector
D. Muller, Reactor Inspector

Approved by: David E. Hills, Chief, Operations Branch
Division of Reactor Safety

EXECUTIVE SUMMARY

D. C. Cook, Units 1 and 2
NRC Inspection Report 50-315/99016(DRS); 50-316/99016(DRS)

This inspection report contains the findings and conclusions regarding the licensed reactor operator (RO) and senior reactor operator (SRO) requalification training program inspection. The inspection included a review of training administrative procedures and operating examination material; observation and evaluation of licensed operators and licensee evaluators during a requalification operating examination; an assessment of simulator fidelity; an evaluation of program controls to assure a systems approach to training; and a review of requalification training records. The inspectors used the guidance in inspection procedure (IP) 71001.

Additionally, the inspection addressed Case Specific Checklist Item No. 5.D, "Applicant Abilities to Communicate and Diagnose Events During Dynamic Simulator Scenarios," that was established through the NRC's Manual Chapter 0350, "Staff Guidelines for Restart Approval."

The following conclusions were made in these areas:

Plant Operations

- With exception of the two SROs, two Shift Technical Advisors (non-licensed), and one RO, the three operating shift crews passed all portions of the requalification operating examination. The individual competency failures were appropriately remediated and reevaluated prior to resumption of licensed duties. Although the evaluators and the inspectors identified some minor weaknesses pertaining to procedure use and crew communications, the aggregate individual performance deficiencies did not adversely impact the crew's ability to implement necessary mitigating actions to safely control the plant during emergencies. (Section O4.1)

Operations Training

- The licensee's training and operations departments have appropriately addressed past program weaknesses, and continues to address issues affecting training program quality. Although some minor performance weaknesses pertaining to procedure use, communications, and command and control were observed during this inspection, the overall operator performance was, in general, satisfactory. (Section O5.1)
- The requalification examination material contained the necessary quantitative and qualitative attributes to provide an effective evaluation of operator skills. However, a few areas needed some enhancements to better probe and evaluate operator responsibilities and performance. These areas included license (SRO and RO) specific job performance measures and properly validated dynamic simulator scenarios. (Section O5.2)
- The licensee satisfactorily administered the annual requalification examinations according to program guidance and consistent with regulatory guidelines. Examination

security throughout the examination period was satisfactory, with the exception of one isolated incident involving security and control of examination material. One simulator scenario was left unattended which compromised the integrity of the examination. The licensee identified and corrected the problem by replacing the compromised scenario. The licensee is tracking this issue internally through its condition report process (CR P-99-18921), and the issue is being treated as a non-cited violation in accordance with Appendix C of the NRC enforcement policy. (Section O5.3)

- The inspectors concluded that the licensee's current student feedback and curriculum development committee (CDC) processes appeared to be effective at incorporating feedback to revise the licensed operator requalification training (LORT) program. The strong representation by both training and operations personnel appeared to enhance the CDC's effectiveness. Overall, the inspectors concluded that licensee's training department self-assessment program was up to date and flexible enough to incorporate emerging training issues. (Section O5.4)
- The inspectors concluded that the current remedial training program contained adequate measures to ensure individual and crew performance weaknesses were identified and assigned. Operator knowledge and performance deficiencies were, in general, properly remediated, and appropriate operator reevaluations were conducted prior to resumption of licensed duties. (Section O5.5)
- The operator's current license conditions were in conformance with program guidance and regulatory requirements of 10 CFR 55.21 for biennial physical examinations. However, two past events and one current situation pertaining to the implementation of the required biennial medical examinations exceeded the required 24 months time limit. The failure to implement the biennial medical examinations within the required time limit was a violation of 10 CFR 55.21. The licensee is tracking this issue internally through its condition report process (CR P-99-15011), and the issue is being treated as a non-cited violation in accordance with Appendix C of the NRC enforcement policy. (Section O5.6)
- The licensee failed to identify and notify the NRC within 30 days of a licensed operator's changing medical condition. The failure to notify the NRC was a violation of 10 CFR 55.25; however, as the licensee took corrective actions per NRC Information Notice 94-14, Supplement 1, and subsequently identified and corrected the issue of the one missed individual, this issue is being treated as a non-cited violation in accordance with Appendix C of the NRC enforcement policy. (Section O5.7)
- The licensee, in general, maintained operator licenses active, in accordance with 10 CFR 55.53(e) and (f). However, the inspectors identified that the licensee's Assistant Shift Supervisor/Manager position in the control room shift organization was inappropriately given proficiency credit for maintaining an active SRO license. The failure to assure that all licensed operators standing watch in the control room organization to perform licensed duties have maintained an active license was a violation of 10 CFR 55.53(e). The licensee is tracking this issue internally through its condition report process (CR P-99-21039), and the issue is being treated as a non-cited violation in accordance with Appendix C of the NRC enforcement policy. (Section O5.8)

Restart Readiness Assessment

- The implementation of actions concerning the licensee's Restart Action Plan 005 to address NRC Case Specific Checklist Item 5.D was considered satisfactory. Furthermore, based on direct observation of crew performances on steam generator tube rupture and other simulator scenarios, and including the licensee's correction to the existing emergency operating procedure foldout page, the actions taken to improve communications and event diagnosis were considered adequate. The NRC Case Specific Checklist Item 5.D, "Applicant Abilities To Communicate And Diagnose Events During Dynamic Simulator Scenarios," is closed. (Section O8.1)

REPORT DETAILS

I. OPERATIONS

O4 Operator Knowledge and Performance

O4.1 Annual Evaluation Performance Review (Operator Requalification)

a. Inspection Scope (71001)

The inspectors observed the performance of two operating shift crews during the annual licensed operator requalification operating examination. One crew was observed on July 21-22, 1999 (Week 1), and the second crew on August 4-5, 1999 (Week 3). In addition, the inspectors reviewed the licensee's evaluations of another shift crew's performance on July 28-29, 1999 (Week 2). Each crew was evaluated on at least two simulator scenarios on the plant specific simulation facility and on five job performance measures (JPM). The inspectors' evaluation referenced the following procedures:

- NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Final Revision 8, April 1999.
- NRC Inspection Procedure 71001, "Licensed Operator Requalification Program Evaluation," July 23, 1998.

b. Observations and Findings

Each operating shift crew was divided into three simulator crews that consisted of a Shift Manager (SM); Unit Supervisor (US); Reactor Operator (RO); Balance of Plant (BOP) Operator; and a Shift Technical Advisor (STA). In addition, an instructor acted as an extra operator as requested by the US to assist in recovery actions for the electrical and back panels. Each simulator crew was observed in at least two scenarios by both the licensee evaluators and NRC inspectors.

All licensed operators who took the JPM walkthrough examination successfully passed. All simulator crews successfully completed each critical task as identified in the dynamic simulator scenarios. The licensee's evaluation team assigned a passing grade for each crew's performance during the dynamic simulator scenario portion of the annual requalification examination. However, the performance of two SROs, two STAs, and one RO were evaluated as unsatisfactory for individual competencies. The competency failures were in the areas of procedure use and STA assessments. These individuals were appropriately remediated and reevaluated prior to resumption of licensed duties.

In addition, the licensee's evaluators identified some minor individual and crew performance weaknesses. These minor weaknesses were in the areas of procedure use, crew communications, and SRO oversight and performance (command and control), as discussed below.

b.1 Communications

The inspectors found that periodic crew briefings conducted by the US were frequent, but sometimes were held at inopportune times. In a few cases, not all of the operators were attentive to the briefs due to involvement in event mitigating activities. The SM and US presented appropriate information and directions to the crew. However, crew communications, at times, were informal and fragmented. In general, the inspectors noted various examples of 2-way versus 3-way communications. On a few occasions, the inspectors noted that plant status information was not readily volunteered by the operators. However, the plant status information and other messages were generally relayed and understood sufficiently to complete the plant mitigating tasks at hand.

b.2 Procedure Use

The operator failures concerning procedure use competencies included incorrect emergency operating procedure (EOP) transition and failure to correctly implement the emergency plan procedures. The incorrect EOP transition included the incorrect decision to trip the reactor coolant pumps in FR-S.1, "Anticipated Transient Without Scram (ATWS)." In addition, incorrect decisions were made to transition from E-0, "Reactor Trip or Safety Injection," to E-2, "Faulted Steam Generator Isolation," and from E-0 to FR Z.1, "Response to High Containment Pressure," when conditions did not warrant such transition. Concerning the incorrect emergency plan implementation, the SM failed to perform the emergency plan classifications within the expected time frame.

b.3 Command and Control

At times, the SRO did not always get the entire crew involved in solving problems. For example, during briefings not all operators were always attentive due to the SRO's choice of when to hold a crew brief. One SRO potentially lost the oversight function of the overall plant operations when acting as the SM. The SM got too involved in the specific operator actions for event mitigation. For example, the SM started reading the specific troubleshooting and mitigating action steps in attempt to restore either off-site power or emergency diesel AC power, when the operator was capable of performing the actions himself.

In general, the above performance weaknesses were adequately identified and documented by the licensee evaluators during the dynamic simulation evaluation. Although some weaknesses were noted, the operators as a team were able to safely control the plant during the emergencies.

c. Conclusions

With exception of the two SROs, two Shift Technical Advisors (non-licensed), and one RO, the three operating shift crews passed all portions of the requalification operating examination. The individual competency failures were appropriately remediated and reevaluated prior to resumption of licensed duties. Although the evaluators and the inspectors identified some minor weaknesses pertaining to procedure use and crew communications, the aggregate individual performance deficiencies did not adversely

impact the crew's ability to implement necessary mitigating actions to safely control the plant during emergencies.

O5 Operator Training and Qualification

O5.1 Operating History

a. Inspection Scope (71001)

The inspectors reviewed the following documents to assess the licensed operator requalification training program's effectiveness regarding operator performance:

- Systematic Assessment of Licensee's Performance (SALP) Report Nos. 50-315/316-98001.
- Initial license operator examination report (50-315/316-97305-OL).
- Initial license operator retake examination report (50-315/316-98305-OL).
- Licensed operator training - Restart Readiness Assessment Team Inspection report (50-315/316-98023).
- Select resident inspector observations and reports.

b. Observations and Findings

As a result of the inspectors' review of the above documents, the inspectors determined that significant weaknesses were identified through past NRC inspections in the training program for licensed operators. These weaknesses included the failure to identify critical tasks and appropriate criteria for simulator scenario development, inconsistencies in individual grading of job performance measure critical tasks, and returning operators to licensed duties without remediation and re-evaluation after they had failed portions of the requalification program. The extent and number of identified weaknesses represented an aggregate decline in performance in the licensed operator training program. However, within the past 12 months, the licensee had generally addressed these deficiencies in the licensed operator continuing training program.

During this inspection, the inspectors noted some minor weaknesses in procedure use and communications while evaluating the dynamic simulator scenario examination. However, the inspectors found that the operators' performance were, in general, satisfactory. The inspectors also found that the licensee's evaluators were adequately evaluating the licensed operators. The inspectors noted that the licensee's training program continued to show improvements.

c. Conclusions

The licensee's training and operations departments have appropriately addressed past program weaknesses, and continues to address issues affecting training program quality. Although some minor performance weaknesses pertaining to procedure use, communications, and command and control were observed during this inspection, the overall operator performance was, in general, satisfactory.

O5.2 Requalification Examinations

a. Inspection Scope (71001)

The inspectors reviewed the licensee's operating examination material using IP 71001 checklists, to assess the examination material quality and content. No biennial written examination was reviewed during this inspection period because the licensee's written examination was scheduled for the year 2000. The following documents were reviewed:

- Three weeks of the annual requalification operating examination material.

b. Observations and Findings

The inspectors reviewed the operating examination material administered during the current annual requalification examination. The inspectors noted that during this year's requalification examination, the licensee was not required to administer the biennial written examination.

The operating examination material contained the necessary quantitative and qualitative attributes to provide a satisfactory evaluation of operator skills. The dynamic scenarios were appropriate and provided ample opportunity to evaluate the crew and individuals based on critical tasks and competencies. The inspectors noted that shift supervisory and STA personnel initially started the scenario outside the simulator until called in for assistance during a plant transient, which resembles actual operating conditions in the plant. Both the JPMs and dynamic scenarios had appropriate steps identified as critical based on the initial verification of expected operator actions. The operating examinations administered each week during this requalification cycle were prepared such that no more than one simulator scenario was repeated from the first week to the third week, and no more than 40% (2 JPMs) of the JPMs in the walkthrough examination were repeated from week to week.

In general, the operating examination material was considered satisfactory. However, the inspectors identified additional enhancements to improve the examination. These items included more rigorous verification and validation of the dynamic simulator scenarios and more in-depth performance (more than one critical task) on JPMs to allow for improved operator evaluations. The following observations were noted during the operating examination.

b.1 Dynamic Simulator Scenarios

- Technical specification events were found to be less challenging. The added challenge in determining multiple and complex technical specification applicability would be beneficial.
- The identification of critical tasks and expected entry into functional recovery procedures could be improved. Although the initially noted and validated critical tasks as documented in the scenarios were satisfactory, the inspectors noted that dependent on the anticipated outcome of a scenario, certain actions may be

considered critical. In addition, the inspectors noted that operators made entry into unexpected functional recovery procedures.

b.2 Job Performance Measures

- Each operator was given five JPMs to perform. Both RO and SRO licensed operators received the same JPMs. Some separation of tasks between ROs and SROs would enhance the overall evaluation. There were no specific SRO only type JPMs to allow for a more in-depth evaluation of SROs.
- Some JPMs pertaining to pump operation, in effect, had only one critical step. These JPMs could be enhanced to evaluate the operators with more in-depth performance. For example, the JPM to align the residual heat removal (RHR) system to subsidize containment spray should require additional tasks of identifying and assessing containment and reactor coolant system parameters prior to aligning the second train of RHR to containment spray. The thermal power determination JPM could have been expanded to include the SRO's technical specification operability assessment as a critical step.

c. Conclusions

The requalification examination material contained the necessary quantitative and qualitative attributes to provide an effective evaluation of operator skills. However, a few areas needed some enhancements to better probe and evaluate operator responsibilities and performance. These areas included license (SRO and RO) specific job performance measures and properly validated dynamic simulator scenarios.

O5.3 Requalification Examination Administration Practices

a. Inspection Scope (71001)

The inspectors performed the following to assess the licensee's policies and practices regarding requalification examination administration, simulator fidelity, and examination security:

- Observed the performance of, and evaluated, three shift operating crews during the current annual requalification operating examination.
- Observed both dynamic simulator scenario and JPM performance.
- Reviewed licensee's examination security practices.
- Observed and reviewed licensee's evaluator performance and documentation.

b. Observations and Findings

The inspectors observed the licensee evaluate two operating shift crew's performance during two dynamic simulator scenarios. In addition, the inspectors reviewed the evaluation documentation of one additional operating crew. The licensee identified operator performance weaknesses, which generally matched the inspectors' assessments. The licensee also identified unsatisfactory performances by two SROs, two STAs, and one RO on the dynamic simulator scenarios. All the operators

satisfactorily passed the JPM portion of the examination. The inspectors noted no undue prompting by the evaluators during the performance of the JPM walkthrough examination. Overall, the licensee's evaluators appropriately evaluated the operating crews and all individual operators.

Two simulator fidelity issues were identified during the inspectors' observation of the operating examination. (See Enclosure 2, "Simulation Facility Report.")

b.1 Examination Material Security

In general, examination security was observed to be satisfactory throughout the examination administration. However, the inspectors determined that a problem existed concerning examination material control. During the first week of the annual requalification examination, the licensee identified that a simulator scenario was uncontrolled. One of the operation's co-evaluators was reviewing one simulator scenario in his office prior to its administration. The individual was called out of his office, but left out the scenario unattended on top of his desk. Another operations person involved in the annual examination found the uncontrolled examination material. The licensee identified the problem and deleted the scenario of concern from the annual examination.

Although the compromised scenario was subsequently exchanged with another scenario, the licensee's operations department generated a condition report (CR P-99-18921) concerning the examination security violation. This event was a violation of 10 CFR 55.49, "Integrity of Examinations and Tests," whereby a examination material was left unattended subject to compromise. (50-315/99016-01(DRS); 50-316/99016-01(DRS)) However, the incident was considered an isolated event, and the licensee identified and corrected the problem prior to any administration of the annual requalification examination.

In addition, the inspectors noted that the licensee's procedure for examination security, Training Program Management Plan (TPMP) 3.03.05, "Operations Training Program Examination Requirements," included the generic information concerning NRC examination security agreement in accordance with NUREG 1021. Specifically, the requirements pertaining to actions necessary if actual or potential (suspected) examination compromise occurred. But, the procedure did not have specifics on how to maintain examination material security when the material was kept by instructors or evaluators outside the examination security room.

c. Conclusions

The licensee satisfactorily administered the annual requalification examinations according to program guidance and consistent with regulatory guidelines. Examination security throughout the examination period was satisfactory, with the exception of one isolated incident involving security and control of examination material. One simulator scenario was left unattended which compromised the integrity of the examination. The licensee identified and corrected the problem by replacing the compromised scenario. The licensee is tracking this issue internally through its condition report

process (CR P-99-18921), and the issue is being treated as a non-cited violation in accordance with Appendix C of the NRC enforcement policy.

O5.4 Requalification Training Program Feedback System

a. Inspection Scope (71001)

The inspectors discussed the licensed operator requalification training (LORT) program's feedback system with the program's lead instructor. In addition, the inspectors performed interviews with licensee personnel (operators, instructors, training management, and quality assurance) and reviewed the following to assess the licensee's training program feedback system effectiveness:

- Licensee conducted training and operations department's self evaluation reports for the year 1998.
- Licensee's Quality Assurance audits for operations and training departments, including the Functional Area Assessment Report of Training, document no. 99-RST-1999-001-TRN, prepared June 30, 1999.
- Operations Head Instruction (OHI)-2070, "Operations Training and Qualification," Revision 13, July 8, 1999.
- Training Administrative Manual (TAM)-3.03, "Licensed Operator Requalification Training," Revision 24, January 11, 1999.
- TAM-3.03.05, "Operations Training Program Examination Requirements," Revision 11.
- Sampling of training critique forms written by both students and plant management personnel.
- Current list of open feedback items maintained in the licensee's training action tracking system database.
- Minutes from the last four meetings of the licensee's curriculum development committee (CDC).
- LORT program topical schedules.

b. Observations and Findings

b.1 Soliciting Student Feedback and Training Critique Forms

The inspectors determined that in 1999 the licensee changed its training critique form and the critique process. The inspectors reviewed a sample of older (mid-1998) and more recent (mid-1999) training critique forms written by students and management personnel. Based on review of the older critique forms, the inspectors determined that the licensee's process for soliciting student feedback appeared to be less than effective in 1998.

The inspectors, however, noted the following improvements regarding the newer (1999) critique forms and process:

- The newer forms consisted of eight yes/no questions, with ample space for student written comments. A large majority (about 80%) of the new forms reviewed contained student written comments.

- The course identifying information (instructor, date, lesson plan number) was filled out on all the new forms reviewed.
- One critique form per student for a whole week of training was used. This reduced the number of critique forms for a topical period of training to approximately 85 forms.
- Simulator training sessions were included on the new forms.

Based on these observations, the inspectors determined that the licensee has made considerable improvements in soliciting student feedback in 1999. Although these forms were an overall improvement compared to the 1998 form, the newer form did not appear to ask the students to comment specifically on several important items, including training technical accuracy, instructor knowledge, and the relevancy of the training to the students' jobs.

b.2 Resolving Student and Other Feedback

The inspectors determined that the licensee responded to student feedback in either a prompt manner or for more difficult issues by entering and tracking the item using a database. Examples of licensee prompt actions included discussing student feedback with instructors and making simple corrections to student handouts. Examples of database entries included reviewing operational events for inclusion into training and to develop training to improve operator performance.

The licensee's LORT program was divided into six week topical periods. During each six week period, each shift of licensed operators (12 to 18 operators per shift) received one week of essentially the same training. Approximately once every six weeks, the licensee's curriculum development committee (CDC) met to determine the training content for upcoming periods. Participants in these CDC meetings included plant management personnel, licensed and non-licensed operators, technicians, training supervisors, and training instructors. Some of the items reviewed by the CDC for upcoming training consideration included: (1) training deficiency reports; (2) training action tracking system items; (3) student critique items; (4) recent operator performance at the plant, in the simulator, and on recent examinations; (5) condition reports; (6) plant and industry events; (7) procedure and design changes; and (8) training commitments.

Overall, the inspectors determined that the CDC process appeared to be effective at incorporating feedback into revising the LORT program. The strong representation by both training and operations personnel appeared to enhance the CDC's effectiveness.

The inspectors noted that the use of multiple databases to track training feedback issues posed a potential problem in the licensee's ability to keep track of and resolve these issues. This potential problem regarding multiple tracking systems was also noted by the licensee in its Training Functional Area Assessment report. Currently, the licensee has in place multiple systems to potentially track training issues, including: the training action tracking system, the training deficiency report system, the condition report system, the training leadership plan system (associated with plant restart), and minutes from the meetings of the curriculum development committee. The inspectors

observed that some training items in one tracking system were repeated or were similar to training items in another system. For other training items, the inspectors observed little or no repetition of the items in the tracking systems.

The inspectors also received self-critical inputs from licensed operators, instructors, Quality Assurance staff members, and management personnel interviewed on the feedback process. The inspectors determined that licensee's self-assessment program was up to date and flexible enough to incorporate emerging training issues.

c. Conclusions

The inspectors concluded that the licensee's current student feedback and CDC processes appeared to be effective at incorporating feedback to revise the LORT program. The strong representation by both training and operations personnel appeared to enhance the CDC's effectiveness. Overall, the inspectors concluded that licensee's training department self-assessment program was up to date and flexible enough to incorporate emerging training issues.

O5.5 Remedial Training Program

a. Inspection Scope (71001)

The inspectors interviewed licensee personnel (licensed operators, instructors/evaluators, and supervisors) and reviewed the following to assess the licensee's remedial training program effectiveness:

- Current year's three individual licensed operators' unsatisfactory performance evaluations (2 SROs and 1 RO).
- Remediation training plans for the current year's three individual licensed operators' unsatisfactory performance.
- Sampling of control room dynamic simulator individual operator and crew performance evaluations conducted by the licensee during the past year's and current year's topical periods.
- Past year's topical period quiz results for all operators in the LORT program.
- Individual licensed operators' training records, including records associated with remediation plans, remediation results, and suspension from licensed duties.
- Discussed the licensed operator remediation process with members of the licensee's training staff.

b. Observations and Findings

The licensee's LORT program was divided into six week training topical periods. During each six week topical training period, each shift of licensed operators (12 to 18 operators per shift) received one week of essentially the same training. At the beginning of each training week, the licensee's training staff typically conducted three to four dynamic simulator exercises to evaluate separate five-man crews of that shift's personnel. At the end of each training week, the licensee typically administered written quizzes to each operator.

The inspectors reviewed the beginning-of-the-week individual/crew dynamic simulator results for two training periods (August 10 - September 25, 1998 and January 26 - March 5, 1999) and the end-of-week quiz results during the past year, to identify individual and crew failures. The inspectors then reviewed the training records associated with a sampling of individuals who either were part of a crew failure, had individually failed, or displayed a decline in performance. Based on these reviews, the inspectors noted the following appropriate licensee remediation and reevaluation practices:

- For individual failures, such as a shift manager who incorrectly classified an emergency event or an individual written quiz failure, remediation typically consisted of individual self study. Occasionally, the licensee also performed additional one-on-one instruction for individuals.
- For crew failures that occurred during dynamic simulator exercises, remediation for the crews typically consisted of an instructor facilitated review of a videotape of the failed exercises plus an emphasis on the crews' weak areas during the remainder of the week's simulator training. Occasionally, the licensee also provided additional practice time in the simulator for crews in remediation.
- At the conclusion of the remediation, the individuals/crews who originally failed a quiz or simulator exercise were reevaluated. For individual failures, the licensee used additional written quizzes or oral examinations for reevaluation. For crew failures which occurred during dynamic simulator exercises, the licensee used additional dynamic simulator exercises for reevaluation of the crews.
- Remediation and reevaluation of individuals/crews typically occurred within the shift's training week. On a few occasions, the remediation and reevaluation process took in excess of one week to complete.

However, during this inspection activity, the inspectors noted two weaknesses in the licensee's remediation and reevaluation practices: (1) operators in the past were not suspended from licensed duties due to quiz failures; and (2) records pertaining to remediation and reevaluation were difficult to obtain and not always complete.

The inspectors determined that in the past, operators were not suspended from performing licensed duties if they failed their weekly quiz. In late November of 1998 this practice was revised, such that if an operator failed a weekly quiz, that operator was suspended from performing licensed duties, until the operator was successfully remediated and reevaluated.

In addition, the inspectors determined that records pertaining to remediation and reevaluation were difficult to obtain and not always complete. Some training records were maintained in a centralized records vault, other records were maintained in various filing cabinets located throughout the training building, and other records were in the possession of shift training liaisons. Eight out of ten individuals whose remediation records were reviewed were initially found to be incomplete. Items that were missing from the individuals' records included one or more of the following:

- Performance improvement plans.
- Simulator critiques associated with failure and retake exercises.
- Copies of failed and retake quizzes.
- Suspension and restoration of the performance of licensed duties records.

Although all of the appropriate documents were eventually located, in two cases it took the licensee two days to resolve the records discrepancies. In addition, after the appropriate documents were located, the inspectors identified that one performance improvement plan form was not completely filled out. This one performance improvement plan form indicated that the operator required a reexamination; however, the sections of the form, which documented the results of the reexamination, and which documented the completion of the improvement plan, were both found by the inspectors to be blank. It was later determined by a review of other records and discussions with members of the training staff that this operator did pass his reexamination.

Pertaining to the current year's annual requalification examination, the inspectors determined that the licensee's training program appropriately contained the requirements for the remediation process. Based on review of the current individual failures, the inspectors noted that the licensee had developed remedial training plans for individuals who demonstrated weaknesses and required successful completion of the remedial training prior to resuming license duties. The licensee's administration of the remedial training program and subsequent reexamination of operators was considered sufficient. In general, the licensee properly identified and corrected licensed operator performance deficiencies during this year's annual requalification examination evaluations.

c. Conclusions

The inspectors concluded that the current remedial training program contained adequate measures to ensure individual and crew performance weaknesses were identified and assigned. Operator knowledge and performance deficiencies were, in general, properly remediated, and appropriate operator reevaluations were conducted prior to resumption of licensed duties.

O5.6 Conformance With Operator License Conditions: Biennial Medical Examinations

a. Inspection Scope (71001)

The inspectors reviewed the following documents to assess the facility and operator licensees' compliance with 10 CFR 55.21 license condition requirements:

- Licensed operator requalification training records.
- A sample of the biennial Medical History for 15 individuals maintaining RO and SRO licenses in accordance with 10 CFR 55.21.

b. Observations and Findings

The inspectors identified three licensed operators who in the past two medical examination cycles had exceeded the 24 months time limits. The time aspect of these physical examinations exceeded the required time limit by approximately 1 to 9 months. When the licensee was informed of the findings, the licensee presented to the inspectors past condition reports that also identified the same issues. The licensee had previously identified and implemented condition reports concerning the missed medical examinations. The condition reports were CR 96-1800, 97-2149, and P-99-15011.

The inspectors reviewed these past condition reports for possible repetitive violations of the biennial medical examinations with the potential for ineffective corrective actions. However, each case involved different initiating circumstances and different corrective actions. The most significant of the three root causes was for CR 96-1800, in which, the medical physician of record for the NRC physicals was not aware of the requirement to review and approve the psychological examinations that were conducted by another physician. Subsequently, at least one operator was noted to have completed his medical examination, when in fact, the operator required a followup psychological review to successfully complete his medical examination. This error was not identified until the licensee reviewed its records approximately 9 months later. The licensee rectified the problem by ensuring that the medical physician of record understood the overall responsibilities of his position to review and approve the complete medical examinations, including the psychological portion of the medical examination.

At the conclusion of this inspection, the licensee was reviewing its methodology of tracking medical examinations. The licensee's corrective actions were to be tracked under the most recent condition report CR P-99-15011. Although the missed medical examinations were of a repetitive issue, the circumstances and nature of each event were of dissimilar root cause; therefore, the inspectors did not consider the missed medical examinations as a violation of ineffective corrective actions. But, the missed medical examinations were violation of 10 CFR 55.21, "Medical Examinations." (50-315/99016-02(DRS); 50-316/99016-02(DRS)) However, the licensee did identify these issues and took adequate corrective actions for the past events (1996 and 1997), including the removal of the operators from licensed duties until satisfactory completion of the medical examinations upon identification of the problem.

c. Conclusions

The operator's current license conditions were in conformance with program guidance and regulatory requirements of 10 CFR 55.21 for biennial physical examinations. However, two past events and one current situation pertaining to the implementation of the required biennial medical examinations exceeded the required 24 months time limit. The failure to implement the biennial medical examinations within the required time limit was a violation of 10 CFR 55.21. The licensee is tracking this issue internally through its condition report process (CR P-99-15011), and the issue is being treated as a non-cited violation in accordance with Appendix C of the NRC enforcement policy.

O5.7 Conformance With Operator License Conditions: Informing The NRC Of Changing Medical Conditions

a. Inspection Scope (71001)

The inspectors reviewed the following documents to assess the facility and operator licensees' compliance with 10 CFR 55.25 license condition requirements:

- Licensed operator requalification training records.
- A sample of the biennial Medical History for 15 individuals maintaining RO and SRO licenses in accordance with 10 CFR 55.25.

b. Observations and Findings

The inspectors identified, through review of past operator medical records, that the licensee appeared not to have notified the NRC within the required 30 days time limit of finding a licensed operator's medical condition exceeding the requirements of ANSI Standard 3.4 - 1983. The medical condition of concern was high blood pressure or hypertension. The inspectors found that at least three licensed operators were diagnosed as having hypertension, but the notification to the NRC was not within the 30 days requirement. When the licensee was informed of this finding, the licensee produced an old condition report CR 97-1920 describing the actions taken on the same issue.

On April 14, 1997, the NRC issued an information notice (IN) 94-14, Supplement 1, "Failure to Implement Requirements for Biennial Medical Examinations and Notification to the NRC of Changes in Licensed Operator Medical Conditions." This IN reminded all licensee's of notifying the NRC of changes in a licensed operator's physical or mental condition, as determined by a physician. The licensee on July 1997, implemented a condition report (CR 97-1920) concerning the adequacy of identifying and informing the NRC of changing medical conditions for hypertension. The licensee conducted an audit of the licensed operators and identified 11 operators with questionable medical qualifications concerning hypertension. The licensee imposed no-solo operation for these 11 operators until the medical conditions were confirmed and appropriate notifications were made to the NRC.

The licensee implemented actions pertaining to the NRC IN 94-14, Supplement 1, to identify and inform the NRC of questionable medical qualifications of 11 operators. But, the inspectors identified that the licensee failed to identify one individual. This one licensed operator was previously diagnosed by the licensee's physician as having high blood pressure and under medication; however, he was not listed as one of the 11 operators on the licensee's condition report. The licensee did not identify the operator's condition until after the corrective actions for CR 97-1920 were completed. Subsequently, the licensee did not submit the medical condition information to the NRC within the 30 days reportability requirement. In general, the failure to notify the NRC within 30 days of learning of the diagnoses of a medical condition not meeting requirements of 10 CFR 55.21 was a violation of 10 CFR 55.25, "Incapacitation because of disability or illness." (50-315/99016-03(DRS); 50-316/99016-03(DRS))

c. Conclusions

The licensee failed to identify and notify the NRC within 30 days of a licensed operator's changing medical condition. The failure to notify the NRC was a violation of 10 CFR 55.25; however, as the licensee took corrective actions per NRC Information Notice 94-14, Supplement 1, and subsequently identified and corrected the issue of the one missed individual, this issue is being treated as a non-cited violation in accordance with Appendix C of the NRC enforcement policy.

O5.8 Conformance With Operator License Conditions: Maintenance of Active Operator Licenses

a. Inspection Scope (71001)

The inspectors interviewed operations and training department personnel and reviewed the following documents to assess the facility and operator licensees' compliance with 10 CFR Part 55.53 license condition requirements:

- OHI-2070, "Operations Training and Qualification," July 8, 1999.
- OHI-4013, "Operators: Authorities and Responsibilities," January 8, 1999.
- Training Administrative Manual (TAM)-3.03, "Licensed Operator Requalification Training," January 11, 1999.
- Condition Report 98-3723, "OE 9176 - Operator proficiency Watches Activities not in Compliance with 10 CFR 50.4 and 55 Requirements, identifies a problem when taking credit for licensed operator proficiency watch standing for position other than those required by Technical Specifications," July 28, 1998.
- Technical Specification Administrative Controls Section 6.2.2, "Facility Staff," Amendments 212 and 197, Units 1 and 2, respectively.
- Technical Specification Table 6.2-1, "Minimum Shift Crew Composition," Amendments 154 and 138, Units 1 and 2, respectively.

b. Observations and Findings

The inspectors reviewed the licensee's program for maintaining RO and SRO licenses active in accordance with 10 CFR 55.53 (e) and (f). The inspectors compared the licensee's control room manning discussed in OHI-2070 to that of the technical specification required control room licensed positions. OHI-2070, Section 4.12, "Licensed Operator Proficiency," specifically notes taking credit for SRO proficiency in three identified positions: (1) the Shift Manager; (2) the Unit Supervisor; and (3) the Assistant Shift Supervisor/Manager (ASS/M). Subsequent to the review of licensed operator records, the inspectors identified that the licensee was taking credit for maintaining an active SRO license for operators standing the ASS/M position in the control room organization.

The licensee previously noted a concern based on operational events concerning a similar issue at another nuclear facility, CR 98-3723. Based on CR 98-3723, the licensee took corrective action for recording the specific times RO's actively performed licensed duties, i.e., special plant manipulation during startups and shutdowns. This corrective action for interim RO activities appeared appropriate to administratively log

the actual time spent manipulating plant controls as time towards active license proficiency. However, for the ASS/M position to take credit for active license proficiency by only standing the position and not being involved in direct supervision of licensed operators' activities was found by the inspectors to be insufficient.

In accordance with 10 CFR 55.53(e), to maintain active operator license status, the licensed operator shall actively perform the functions of an operator or senior operator on a minimum of seven 8-hour or five 12-hour shifts per calendar quarter. If a licensed operator has not been actively performing the functions of a licensed operator commensurate with the license, the operator may not resume licensed activities unless performing the reactivation watch standing under instruction per 10 CFR 55.53(f). According to 10 CFR 55.4, "Definitions," actively performing the functions of an operator or senior operator means that an individual has a position on the shift crew that requires the individual to be licensed as defined in the facility's technical specifications, and that the individual carries out and is responsible for the duties covered by that position.

The inspectors identified that the licensee's Technical Specifications Table 6.2-1, "Minimum Shift Crew Composition," only specified four licensed operators (two licensed operators (RO) and two senior licensed operators (SRO)). The rule does not preclude or discourage having additional licensed operators on shift beyond the minimum technical specification staffing requirements; however, to take credit for license proficiency (active status) based on 10 CFR 55.53 these individuals must manipulate the controls in the case of an operator, or direct the licensed activities in the case of a senior operator, commensurate to the positions defined in the technical specifications.

The inspectors also identified that the ASS/M were appropriately trained and evaluated in accordance with their respective license during licensed operator requalification training. However, the inspectors determined that these licensed operators were not appropriately maintaining their operator licenses active in accordance with NRC regulations by standing the ASS/M position alone, for the ASS/M position is not a technical specification defined position for the SRO licensed operators. The inspectors further noted that the licensed operators standing only the ASS/M position would be considered to only hold an inactive SRO license. Therefore, if these operators only stood the ASS/M position and did not perform direct supervision of licensed activities, 10 CFR 55.53 would not be violated. However, after a review of a small sample of licensed operator records, the inspectors identified that at least one individual who normally stood the ASS/M position during a calendar quarter, also stood one watch as an Unit Supervisor. An inactive licensed operator standing an active licensed control room organization shift position was a violation of 10 CFR 55.53(e). (50-315/99016-04(DRS); 50-316/99016-04(DRS))

Furthermore, the licensee had the opportunity, but failed to identify and correct the issue of maintaining active SRO license for the ASS/M position during its review of condition report CR 98-3723. However, the licensee generated a new condition report, CR P-99-21039, to track its assessment and corrective actions for taking credit for the ASS/M position.

c. Conclusions

The licensee, in general, maintained operator licenses active, in accordance with 10 CFR 55.53(e) and (f). However, the inspectors identified that the licensee's Assistant Shift Supervisor/Manager position in the control room shift organization was inappropriately given proficiency credit for maintaining an active SRO license. The failure to assure that all licensed operators standing watch in the control room organization to perform licensed duties have maintained an active license was a violation of 10 CFR 55.53(e). The licensee is tracking this issue internally through its condition report process (CR P-99-21039), and the issue is being treated as a non-cited violation in accordance with Appendix C of the NRC enforcement policy.

O8 Miscellaneous Operations Issues

O8.1 Review Of NRC Case Specific Checklist Item 5.D, "Applicant Abilities To Communicate And Diagnose Events During Dynamic Simulator Scenarios"

a. Inspection Scope (71001)

The inspectors reviewed NRC Case Specific Checklist Item 5.D regarding the initial license applicants' abilities to communicate and diagnose events during the dynamic simulator scenario examination. As part of this inspection, the inspectors reviewed the following documents:

- NRC inspection report (IR) 50-315/316-98023, "Restart Readiness Assessment Team Inspection," January 19, 1999. (IR 98023)
- Licensee's Restart Action Plan 005, "Operator Training Issues," August 3, 1999.

b. Observation and Findings

b.1 Documented Licensee Actions

The inspectors reviewed the NRC's previous assessment as documented in IR 98023, that described the Training Department Strategy No. 5267 of licensee Restart Issue No. 8765, regarding the initial license applicants' abilities to communicate and diagnose events during the dynamic simulator scenario examination. The NRC documented in IR 98023 that the licensee completed the action items as listed in the NRC Case Specific Checklist Item 5.D. However, due to the observed poor performance of operators during continuing training evaluated scenarios, specifically the steam generator tube rupture (SGTR) simulator scenario, Item 5.D was not closed.

During this inspection, in addition to the licensee's completed action items as documented in IR 98023, the inspectors reviewed the licensee's Restart Action Plan 005, "Operator Training Issues." The Restart Action Plan 005 was the licensee's latest corrective actions to address the NRC Case Specific Checklist Item 5.D. The corrective actions addressed both restart and post restart items.

b.1.1 Restart Action Plan 005 - Restart Corrective Actions

(1) Corrective Action #1 (Restart)

Conduct instructor training needs analysis to identify areas for operations section instructor continuing training. The licensee completed this action as documented in licensee's NRC 0350 Closeout Package No. 313.

(2) Corrective Action #2 (Restart)

"As found" simulator evaluations are conducted at the beginning of each week of continuing training. The licensee completed this action as documented in TAM 3.03.05, "Operator Training Program Examination Requirements."

(3) Corrective Action #3 (Restart)

All simulator evaluations are conducted with two operations co-evaluators and two training evaluators. The two operations co-evaluators consist of designated Operations Managers. The licensee completed this action as documented in OHI-2070, "Operations Training and Qualifications." In addition, the inspectors observed the operations co-evaluators during the dynamic simulator evaluations.

(4) Corrective Action #4 (Restart)

Shift Managers and Shift Liaisons are required to work cooperatively to develop an Operations End-of-Week training summary. Information regarding crew performance in the area of communications, diagnostics/technical abilities, procedure adherence, etc., can be found in these reports. These reports are forwarded to all the Shift Managers and senior plant managers to review for generic weaknesses. The licensee completed this action as documented in OHI-2070.

(5) Corrective Action #5 (Restart)

Academic Review Boards are convened when the performance of any Operations Training program participant indicates the presence of deficiencies or behaviors that interfere with his/her ability to carry out the duties and responsibilities of their job functions or meet the objectives of the training program. The licensee completed this action as documented in OHI-2070.

(6) Corrective Action #6 (Restart)

Operations standard and expectations associated with communications, briefings, procedural adherence, etc., have been incorporated into procedures to more clearly define the standards and expectations. The licensee completed this action as documented in OHI-2070 and in OHI-4000, "Conduct of Operations: Standards."

b.1.2 Restart Action Plan 005 - Post Restart Corrective Actions

(1) Corrective Action #1 (Post Restart)

Review and revise existing processes for changing Initial License Training (ILT) program content, structure, and schedule as necessary to meet the standards of the Systematic Approach to Training (SAT) process. The licensee has already completed this action in the form of the Curriculum Development Committee and as documented in Plant Manager Instruction (PMI)-2070.600, "Training Administration and Qualification."

(2) Corrective Action #2 (Post Restart)

Revise OHI-2070 and Training Administrative Manual 3.01 to ensure appropriate level of review and approval by Operations Management and Training Management for ILT program content, structure, and schedule changes. The licensee has already completed this action as documented in PMI-2070.600.

(3) Corrective Action #3 (Post Restart)

Establish a minimum set of qualifications and work experience for the instructors used in the classroom and simulator portions of the ILT program. The licensee has already completed this action as documented in Training Program Description (TPD) 600.IT, "Instructor Training and Qualification Program Description."

(4) Corrective Action #4 (Post Restart)

Revise the instructor training program to include specific qualification standards for instructors teaching ILT integrated plant operations on the simulator. The licensee has already completed this action as documented in TPD.600.IT.

b.2 Inspectors Review of Licensee Actions

The NRC documented the licensee's completed closeout of licensee restart Action Items 1.4.a - b, of licensee Restart Issue No. 8765, regarding the NRC Case Specific Checklist Item 5.D, in NRC IR 98023. The NRC inspectors had concluded that the performance of the crews observed during the Period 5 scenarios, RQ-E-2352, "Steam Generator Tube Rupture," were poor with two of four crews failing and a third crew nearly failing. The licensee had identified additional crew and individual failures during previous evaluations not observed by the inspectors. The implementation of actions concerning the licensee's Action Items 1.4.a and b, and the additional processes including the SM report and Academic Review Board had the potential to improve the preparation of operators. However, based on the poor operator performances during the SGTR scenarios, the inspectors considered the licensee's actions to improve communications inadequate.

During this inspection, the inspectors reviewed the licensee's additional corrective actions as documented in Restart Action Plan 005. The Restart Action Plan 005 was

developed in direct response to the NRC's assessment of NRC Case Specific Checklist Item 5.D, in NRC IR 98023. The above listed corrective actions in Section b.1.1 and b.1.2, both restart and post restart, were implemented to improve operator performance in the area of communications. The inspectors reviewed these corrective actions and found that the licensee completed the programmatic improvements, including procedural updates. However, the effectiveness of these corrective actions would be assessed by direct observation of operator performance during dynamic plant operations.

The inspectors observed operator performance of two operating shift crews that were divided into six simulator crews. Each simulator crew was evaluated on at least two dynamic simulator scenarios. The major malfunctions for these simulator scenarios included SGTR with an isolable steam line break, large break loss of coolant accident (LOCA), ATWS with a small break LOCA, SGTR with a steam line break on another steam generator, loss of all AC power, and a ruptured and faulted steam generator. The inspectors found that the operators as a crew performed satisfactorily. With some minor discrepancies as noted in Section O4.1, crew communications and diagnostic activities were, in general, demonstrated satisfactorily with adequate crew interactions. Overall, the inspectors did not observe the similar poor operator performance as was described in NRC IR 98023.

Upon further review, the inspectors determined that the past poor operator performance, during the SGTR scenarios, as documented in NRC IR 98023, was apparently due to an error during the licensee's upgrading of the EOPs.

On August 24, 1998, the criteria in the EOP foldout page for early diagnosis and action for several plant conditions were removed. In particular, the early diagnosis and isolation of auxiliary feedwater to a ruptured steam generator was mistakenly removed. Without this early diagnosis criterion for a SGTR condition, the operators must proceed through the EOPs until the procedure specifically directs mitigating actions in the SGTR EOP. The time delay, caused by the licensee's EOP upgrade error, resulted in the unsatisfactory response and mitigation for the SGTR, as noted in NRC IR 98023.

Subsequent to the observed poor operator performance as described in NRC IR 98023, the licensee reinstated the original EOP foldout page with the multiple early diagnosis criteria.

c. Conclusions

The implementation of actions concerning the licensee's Restart Action Plan 005 to address NRC Case Specific Checklist Item 5.D was considered satisfactory. Furthermore, based on direct observation of crew performances on steam generator tube rupture and other simulator scenarios, and including the licensee's correction to the existing emergency operating procedure foldout page, the actions taken to improve communications and event diagnosis were considered adequate. The NRC Case Specific Checklist Item 5.D, "Applicant Abilities To Communicate And Diagnose Events During Dynamic Simulator Scenarios," is closed.

V. Management Meetings

X1 Exit Meeting Summary

The inspectors presented the preliminary inspection results to Mr. Powers and other members of licensee management and staff at the conclusion of the site inspection on August 17, 1999.

The licensee acknowledged the findings presented and did not identify any of the information reviewed as proprietary.

PARTIAL LIST OF PERSONS CONTACTED

American Electric Power

R. Anderson, Operations Training Coordinator
R. Brown, Operations Requalification Training
L. Bush, AEP Operations
R. Gaston, Compliance Manager
R. Godley, Director Regulatory Affairs
S. Kashar, Operations/Shift Manager
W. Nelson, Operations Initial License Training
W. Nichols, Operations NLO/Exam Team
R. Powers, Senior Vice President
R. Sieber, Operations Training
T. Taylor, Regulatory Compliance
K. VanDyne, Regulatory Affairs
J. Walker, Operations Training Manager
B. Wallace, Training Manager
L. Webber, Operations Manager
S. Wolf, PA/Surveillance Supervisor

US Nuclear Regulatory Commission

B. Bartlett, Senior Resident Inspector

INSPECTION PROCEDURES USED

IP 71001 Licensed Operator Requalification Program Evaluation

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

- | | | |
|--------------------------|-----|---|
| 50-315/316-99016-01(DRS) | NCV | Examination material left out unattended subject to compromise, a violation of 10 CFR 55.49. (Section O5.3) |
| 50-315/316-99016-02(DRS) | NCV | Failure to implement the biennial medical examinations within the required time limits of 10 CFR 55.21. (Section O5.6) |
| 50-315/316-99016-03(DRS) | NCV | Failure to notify the NRC within 30 days of learning of the diagnoses of a medical condition not meeting requirements of 10 CFR 55.21. (Section O5.7) |
| 50-315/316-99016-04(DRS) | NCV | Inactive licensed operator standing an active licensed control room organization shift position was a violation of 10 CFR 55.53(e). (Section O5.8) |

Closed

- | | | |
|--------------------------|-----|---|
| 50-315/316-99016-01(DRS) | NCV | Examination material left out unattended subject to compromise, a violation of 10 CFR 55.49. (Section O5.3) |
| 50-315/316-99016-02(DRS) | NCV | Failure to implement the biennial medical examinations within the required time limits of 10 CFR 55.21. (Section O5.6) |
| 50-315/316-99016-03(DRS) | NCV | Failure to notify the NRC within 30 days of learning of the diagnoses of a medical condition not meeting requirements of 10 CFR 55.21. (Section O5.7) |
| 50-315/316-99016-04(DRS) | NCV | Inactive licensed operator standing an active licensed control room organization shift position was a violation of 10 CFR 55.53(e). (Section O5.8) |

NRC Case Specific Checklist Item 5.D	Applicant Abilities To Communicate And Diagnose Events During Dynamic Simulator Scenarios.
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Discussed

None

LIST OF ACRONYMS USED

AFW	Auxiliary Feedwater
ASS/M	Assistant Shift Supervisor/Manager
ATWS	Anticipated Transient Without Scram
BOP	Balance Of Plant
CDC	Curriculum Development Committee
CFR	Code of Federal Regulations
CR	Condition Report
DRP	Division of Reactor Projects
DRS	Division of Reactor Safety
ECCS	Emergency Core Cooling Systems
EOP	Emergency Operating Procedure
IFI	Inspection Followup Item
ILT	Initial License Training
IP	Inspection Procedure
IR	Inspection Report
JPM	Job Performance Measure
LCO	Limiting Condition for Operation
NCV	Non-Cited Violation
NRC	Nuclear Regulatory Commission
OHI	Operations Head Instruction
OHP	Operations Head Procedure
PMI	Plant Manager Instruction
PORV	Power Operated Relief Valve
RCS	Reactor Coolant System
RHR	Residual Heat Removal
RO	Reactor Operator
SAT	Systematic Approach to Training
SG	Steam Generator
SGTR	Steam Generator Tube Rupture
SM	Shift Manager
SRO	Senior Reactor Operator
STA	Shift Technical Advisor
TAM	Training Administrative Manual
TPD	Training Program Description
TPMP	Training Program Management Plan
TS	Technical Specification
US	Unit Supervisor
USAR	Updated Safety Analysis Report

SIMULATION FACILITY REPORT

Facility Licensee: D. C. Cook

Facility Licensee Docket No.: 50-315; 50-316

Operating Tests Administered: July 21-22 and August 4-5, 1999

This form is to be used only to report observations. These observations do not constitute audit or inspection findings and are not, without further verification and review, indicative of noncompliance with 10 CFR 55.45(b). These observations do not affect NRC certification or approval of the simulation facility other than to provide information that may be used in future evaluations. No licensee action is required in response to these observations.

While conducting the simulator portion of the operating tests, the following item was observed:

ITEM	DESCRIPTION
Steam Generator Power Operated Relief Valve (PORV)	During one scenario, while the steam generator PORVs were selected to manual and closed, the valves inadvertently automatically opened upon reaching the auto setpoint. Cause was unknown. The licensee was to investigate and repair, as necessary.
Steam Generator Level Indications	During a ruptured steam generator scenario, with plant conditions of primary to secondary differential pressure was approximately 700 psig and the steam generator was isolated, no level change occurred on the ruptured steam generator. The licensee was to investigate and repair, as necessary.